

Remarks

5 **The rejections under 35 U.S.C. 101**

Claim 1 as amended

Claim 1 as currently amended reads as follows:

1 1. (currently amended) A graphical user interface for specifying an
 2 operation to be performed on a user-defined field of a record representing
 3 a process in conjunction with posting an activity as performed with regard
 4 to the process, the user-defined field being stored in a storage device
 5 accessible to a processor and the processor performing the operation on
 6 the user-defined field in conjunction with posting the activity, the activity
 7 having an activity type and the graphical user interface comprising:
 8 a window for the activity type containing
 9 a first field in which the user can identify the user-defined
 10 field to be operated on; and
 11 one or more operation fields that, when the user has
 12 identified the user-defined field, the user may set to specify the operation,
 13 whereby the specified operation is performed by the processor on the
 14 identified user-defined field in conjunction with posting the activity.

In making these rejections, Examiner states that the claims "are non-statutory data structures because they are descriptive materials per se since the claim recited a window and fields in the window" and "even if the data structure is functional, they must be embodied on a computer readable medium." Applicant has overcome the rejection by amending claim1 to include the language,

10 the user-defined field being stored in a storage device accessible to a
 processor and the processor performing the operation on the user-defined
 field in conjunction with posting the activity

The amendment recites a data structure that is functional and is further stored in a computer readable medium. Support for the amendment can be found on page 6 of Applicant's application as filed in the section with the title, "Overview of the process

control system in which the invention is embodied--FIG. 8". The amendment further recites what was implied in the un-amended claim and therefore does not affect the scope of the claim as originally filed.

- 5 Since claim 1 as amended is now addressed to patentable subject matter, so are dependant claims 2-19 and the amendment of claim 1 has therefore overcome Examiner's rejection of claims 1-19.

Traversal of the rejections of claims 1, 20 and 37 under 35 U.S.C. 102

10

An examiner may make a rejection of a claim under 35 U.S.C. 102 only if " each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP e8, rev.2, May. 2004, Sec. 2131, p. 2100-73. In the following, Applicants will first discuss what Applicants are claiming, will then discuss
15 the disclosure of Comer, and will then show why Comer does not anticipate claims 1, 20 and 37.

Applicant's system

Applicant's system is a process control system that includes a database system. FIG. 8 and the
20 discussion beginning on page 6 of Applicant's Specification provide an overview of process control system 801. Database system 825 includes a process record table 833. The records in process record table 833 are disclosed in detail on page 12. The process record contains fields that indicate the current state of the process represented by the record. Among these fields are fields that are defined by the user of the process control system. Examples of such fields are given at page 13, line
25 16. As set forth in overview at page 6, lines 26-40, the process control system works by querying the process record database table for process records whose field values satisfy conditions indicated in the query. When a process record is part of a query result, an action is taken with regard to the process. One of the actions that can be taken is posting an activity that concerns the process as performed. This is done by making an entry for the activity and process in PR_Activity table 839,
30 which is described in detail on page 16.

Applicant's claim 1

Applicant's claim 1 is directed to a graphical user interface for specifying an operation to be performed on a user-defined field in a process record. The preamble of the claim sets forth

5 A graphical user interface for specifying an operation to be performed on a user-defined field of a record representing a process in conjunction with posting an activity as performed with regard to the process

The body of the claim sets forth the following limitations:

10 a window for the activity type containing
a first field in which the user can identify the user-defined field to be operated on; and
one or more operation fields that, when the user has identified the
15 user-defined field, the user may set to specify the operation,
whereby the specified operation is performed by the processor on the identified user-defined field in conjunction with posting the activity.

As explained at page 58, lines 3-13, the invention may be

20 used with any user-defined field in a PR record and may be used to perform any operation on the user defined field (lines 7-8),

the preferred embodiment is, however limited in that the user may only set certain kinds of user-defined fields and the operation is fixed for each kind of user-defined field is set (lines 8-13).

25 FIG. 20 shows the preferred embodiment's GUI for specifying the user-defined field and the operation to be performed on it. As described in detail beginning at page 58, line 39, the "window for the activity type" of the claim is embodied in window 2001. The activity type is selected from list 2003, as shown at selected activity type 2005. The "first field" is embodied in FIG. 20 in field 2019 or 2021. The limited nature of the embodiment of FIG. 20 is seen from the fact that the fixed
30 operation to be performed on the selected user-defined field is simply indicated by a legend above the field. The "one or more operation fields" are, however disclosed in FIG. 13, which is described at page 49, lines 15-39. As stated there,

35 The entry 1302 for each field has the field's name (1303), its type (1305), i.e., whether its values may belong to a single type or to more than one type, the operation to be performed on the field's value (1307), which is one of set, increment,

or clear, as shown by the drop-down menu at 1311, and the value to which the field is to be set (1309), if the set operation is specified.

Fields 1307 and 1309 are thus an embodiment of the “one or more operation fields”, and as is clear from page 58, lines 6-8, Applicant’s Specification and claim 1 as filed clearly contemplate a graphical user interface like that of FIG. 20 which permits specification of operations on the user-defined variables in the manner shown in FIG. 13.

What Comer discloses

The abstract of the Comer patent provides an overview of what the patent discloses:

A method of entering and saving data using a spreadsheet program, includes providing a spreadsheet template that defines a spreadsheet form, and creating multiple instances of the spreadsheet form defined by the spreadsheet template. Each instance of the spreadsheet form has data-entry cells containing variable data. The method includes a step of associating each form instance with a different record of a database, wherein each database record has record fields corresponding respectively to data-entry cells of the form instances. When the user saves a particular form instance as a spreadsheet using the spreadsheet program, instructions associated with the form instance also save the variable data from the data-entry cells in corresponding record fields of an associated database record.

In broad terms, what the method does is map spread sheet cells onto fields of records in a database system. Examiner will immediately see that mapping spread sheet cells onto fields of records in a database system of course has nothing whatever to do with Applicant’s claimed

graphical user interface for specifying an operation to be performed on a user-defined field of a record representing a process in conjunction with posting an activity as performed with regard to the process

Examiner can confirm that Comer’s disclosure has nothing whatever to do with what Applicants are claiming by comparing Applicant’s FIG. 20 with Comer’s FIG. 6. Applicant’s FIG. 20 shows a field 2019 for specifying that a date-time user-defined field be set when the activity selected in table 2003 is performed and a field 2021 for doing the same for a set person user-defined field. Neither of these user-defined fields is mapped to anything else. Comer’s FIG. 6, by contrast is a GUI for mapping spread sheet cells onto fields of records. The GUI of FIG. 6 is described at Col 5, Line 54 of the Comer patent:

the template wizard prompts the user to identify correspondences between data-entry cells of the identified spreadsheet and record fields of the identified database. A text box 118 allows the user to specify a specific table of the database to be used for storing data. A first column of text boxes 120 corresponds to different spreadsheet cells. A second column of text boxes 122 corresponds to different database fields. The user is responsible for identifying, in each row, a cell having variable data which is to be saved and a corresponding database field in which the data is to be saved.

10 *Comer's failure to anticipate Applicant's claim 1*

As is apparent from the foregoing, Comer discloses nothing whatever corresponding to Applicant's claimed

15 graphical user interface for specifying an operation to be performed on a user-defined field of a record representing a process in conjunction with posting an activity as performed with regard to the process,

Further, Comer's graphical user interface for mapping spread sheet cells to database record fields discloses nothing about user-defined fields in process records and thus nothing about
20 a first field in which the user can identify the user-defined field to be operated on
or

25 one or more operation fields that, when the user has identified the user-defined field, the user may set to specify the operation

As regards the operation fields, Comer's GUI only maps spread sheet cells to database record fields; the GUI cannot be used to specify operations on either the spread sheet cells or the database records.

30 Because Comer's GUI is addressed to mapping spread sheet cells to database records, and not to specifying an operation to be performed on a user-defined field of a record and because Comer discloses none of the limitations of claim 1, Examiner's rejection of claim 1 under 35 U.S.C. 102 as anticipated by Comer is without foundation.

35 *The rejection of claims 20 and 37 under 35 U.S.C. 102*

Claims 20 and 37 are directed to a process control system that has a table of process records (20, line 4), a table of activity type records (20, 7), and program code which

is executed in conjunction with posting an activity defined by at the least one activity type record in the system, the activity being posted as performed with regard to a process represented by a given process record and the operation specified in the at least one activity type record being done during execution of the portion of the program code. (20,10-14)

Claim 37 is similar enough to claim 20 that the following discussion will apply to both.

As is apparent from the discussion of claim 1 above, Comer does not disclose a process control system and as would be expected from that fact, discloses nothing about the claimed “table of process records”, the claimed “table of activity type records”, or a “portion of program code” that behaves in the manner set forth in the claim. Comer consequently discloses none of the limitations of claim 20 or claim 37 and Examiner’s rejection of these claims under 37 C.F.R. 102 as being anticipated by Comer is also without foundation.

Traversal of the rejections of claims 2, 5-7, 9, 11, 14, 16, 17-19, 21, 24, 26, 29-31, 33, 36 and 40 under 35 U.S.C. 102

As for the dependent claims, they are of course patentable over Comer because they are dependent from patentable claims, but they are also patentable in their own rights over the reference.

Claims 2,5-7,9,11,14,16,17-19: These claims all set forth limitations for setting the “operation field” in the graphical user interface of claim 1. As Comer does not have an operation field in his graphical user interface, all of these claims are patentable in their own right over the reference.

Claim 21: There is no disclosure of a “table of activity type records in the database system” in the Comer patent.

Claims 24 and 26: There is no disclosure in the Comer patent of an “activity type record” or a “user of a process control system.”

Claims 29-36: These claims set forth details of the operations which may be performed on Applicant's user-defined fields. As pointed out above, there is no disclosure in the Comer reference of any kind of operation that is performed on a record in a database system, and consequently,
5 Comer does not disclose any of the limitations added in these claims.

Traversal of the rejections of claims 3, 4, 8, 10, 12, 13, 15, 22, 23, 25, 27, 28, 32, 34, 35, 38, 39, 41, and 42 under 35 U.S.C. 103

10 Lack of a prima facie case for rejecting these claims under 35 U.S.C. 103

When rejecting a claim under 35 U.S.C. 103, Examiner has the burden of establishing a *prima facie* case for the rejection. As set forth at MPEP 2142, to establish the *prima facie* case, Examiner must show the following:

15 First, there must be some suggestion or motivation . . . to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

20 These claims are all dependent either directly or indirectly from claims 1, 20, and 37 and the rejections all involve combinations of other references with Comer. As pointed out in the discussion of the rejection of claims 1, 20, and 37, Comer discloses none of the limitations set forth in those claims. Consequently, a *prima facie* case for rejection of claims dependent from claim 1, 20, or 37 cannot be made under 35 U.S.C. 103 by finding a reference that discloses the limitation
25 added by the dependent claim and combining that reference with Comer. Since that is the case, Examiner has failed to make his *prima facie* case for rejection under 35 U.S.C. 103 for any of these claims and the rejections are without foundation.

Failure of Greif to show the added limitations of certain of the dependent claims

30 In making his rejections under 35 U.S.C. 103, Examiner combines Comer with Greif. The Greif patent discloses a spreadsheet that has been modified so that the user can easily work with different

versions of the spreadsheet data. The abstract of the Greif patent gives a good overview of what is disclosed:

5 A computer programmed to represent a *spreadsheet* that can be displayed to a user, the *spreadsheet* including an array of cells for storing user entered data, the programmed computer including programmed logic for designating a group of one or more cells within the *spreadsheet*, the group of one or more cells containing a first set of user entered data; programmed logic for creating an alternative for the group of one or more cells, said alternative containing a second set of user entered data that is different from the first set of user entered data; and programmed logic for enabling
10 the user to select between the group of one or more cells and the alternative as the source of the data that is used in a corresponding group of cells within the *spreadsheet*. (emphasis added)

FIG. 3 of the Greif patent shows the user specifying the cell information that the program is to save with an alternative, where alternatives are version of named ranges. It will be immediately apparent to Examiner from Greif's *Abstract* that Grief has as little to do with what Applicant is claiming as does Comer, and since that is so, it is not surprising that in many cases, Greif does not disclose the limitation added in a dependent claim

20 Claims: 4, 8, 10, 32, 42:

The added limitations in these claims all have to do with setting a user-defined field to a null value. In her rejection, Examiner states that a field with a "null value" is not disclosed in Comer but is disclosed at Grief Col 36 Lines 65-67 and that "it would have been obvious to one of ordinary skill
25 in the art at the time of the invention to apply Grief to Comer, proving Comer the benefit of setting a value null or not, which would be beneficial to the user." Greif Col 36 Lines 65-67 discloses a null value for a file reference if the file reference is to a workspace. This simply has nothing whatever to do with setting a user-defined field of a process record to null value in conjunction with posting an activity, as set forth in Applicant's claim 4 or with the consequences of setting a user-
30 defined field to a null value that are set forth in claims 8, 10, 32, and 42.

Claims: 3, 12, 13, 15, 25, 27, 34, 35, 39, 41:

The limitations added by these claims involve types of user-defined fields whose values belong to system-defined ordered sets, types whose values specify times, and types whose values specify persons. In her rejections of these claims, Examiner states that a field or type containing a date and/or time is not disclosed in Comer but is disclosed at Greif Col 34 Lines 45-55 and that it would have been obvious to one of ordinary skill in the art at the time of the invention to apply Greif to Comer. The cited location discloses system-maintained status information about an object in a spreadsheet program including the date and time the object was created. There is simply no indication whatever in Greif that *user-defined* variables may have such types, that such user-defined variables might be fields in process records, or of the mechanisms set forth in Applicant's claims for defining and using values of these types. Consequently, Greif discloses nothing like Applicant's added limitations.

Claims: 22, 23, 28, 38

These claims are addressed to interactions between queries on the process record table and posting of activities. Examiner rejects the claims by stating the a query is not disclosed in Comer but is mentioned at Greif Col 31 Lines 54-56 and that it would have been obvious to one of ordinary skill in the art at the time of the invention to apply Greif to Comer, proving the benefit of processing a query. What is set forth at Col. 31, lines 54-56 is the following:

The "to save or not to save" flag is set optionally at the time the item is constructed.
The external API provides calls to query and set the persistence of a setting;
internally, Setting class 130 has methods to achieve this.

The use of "query" at the cited location clearly has nothing whatever to do a query on a database system, and it is in the latter sense that the term "query" is used in Applicant's Specification and claims. Consequently, Greif does not show the additional limitations of these claims and the claims are therefore patentable in their own rights over the references.

Conclusion

Applicants has amended claim 1 to overcome the rejection of claims 1-19 under 35 U.S.C. 101 and has traversed the remaining rejections. Applicant has thereby been completely responsive to

Examiner's first Office action of 10/06/04 and has fulfilled the requirements of 37 C.F.R. 1.111(b). Applicant consequently respectfully requests that Examiner continue with his examination of the application and allow the claims as amended, as provided by 37 C.F.R. 1.111(a). No fees are believed to be required by reason of this amendment; should any be, please charge them to deposit account number 501315.

Respectfully submitted,

Gordon E. Nelson

Attorney of record,
Gordon E. Nelson
57 Central St., P.O. Box 782
Rowley, MA, 01969,
Registration number 30,093
Voice: (978) 948-7632
Fax: (866) 723-0359

1/6/2005

Date

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
Post Office Box 1450,
Alexandria, VA 22313-1450

on 1/6/2005
(Date)

Gordon E. Nelson, #30,093

Gordon E. Nelson
(Signature)